Lifepearl loaded with doxorubicin - downstage a patient with HCC to reach liver transplant

Physician: Nuno Vasco Costa, MD
Location: Hepato-Biliary-Pancreatic and Transplantation Centre, Curry Cabral Hospital Lisboa, Portugal

CLINICAL CASE
67 years old male with alcoholic related cirrhosis (abstinent in the last 2 years) and negative HBs antigen and anti-HCV antibody. An elevated level of serum liver enzymes (ALT, AST, ALP and GGT) was present and Child-Pugh score was A. He developed 2 hepatocellular carcinoma with 5.3 cm (IVA segment) and 3.8 cm (VI segment) beyond the Milan and up-to-seven criteria. Tumor board decision was to perform DEB-TACE as a downstaging therapy while waiting on the list of liver transplantation.

PROCEDURE
After local anesthesia of the skin and subcutaneous tissue, a 5 F Simmons 2 catheter was placed through a 5 F introducer in the coeliac trunk. Angiography confirmed both lesions and all the feeding arteries were selectively catheterized and embolized by means of a microcatheter Progreat 2.7 F.
Four vials of LifePearl (200 µm), charged with 75 mg of doxorubicin each, were administered - two vial per lesion in two sessions scheduled with an interval of four weeks - until we got near stasis.

FOLLOW UP/ CONCLUSION
Follow-up CT scan performed 6 months after the procedure demonstrated a complete response with significant intralesional necrosis and shrinkage of both lesions (5.3 to 2.9 cm and 3.8 to 2.8 cm) and the patient became eligible for transplantation that was performed within 7 months after the DEB-TACE session.

PRODUCTS USED
LifePearl 8 mL of microspheres + 300 mg doxorubicin (2 sessions)
5F Simmons-2 catheter, 2.7 F progreat microcatheter and 0.021 GLIDEWIRE® GT Guidewire.